



# Bulletin

U. S. NAVAL RADIOLOGICAL DEFENSE LABORATORY  
SAN FRANCISCO 24, CALIFORNIA

HPS-HRA-616

4 April 1952 No. 217

The kindly word that falls today may bear its fruit tomorrow.

-- Gandhi

## NRDL SCIENTISTS TO TAKE PART IN BIOLOGICAL MEETING

Our Laboratory will be well represented at the meeting of the Federation of American Societies for Experimental Biology to be held in New York City on 14-18 April. The attendance will probably number in the thousands. This annual meeting is the largest and most all-inclusive of the fields of experimental biology and medicine, since it includes six of the major scientific societies--American Physiological Society, American Society for Biological Chemists, American Society for Pharmacology and Experimental Therapeutics, American Society for Experimental Pathology, American Institute of Nutrition, and American Association of Immunologists.

Members of the Biological and Medical Sciences Division of NRDL who will attend the meeting and present papers are: Misses Helen Supplee & Marguerite Swift; Doctors Cecil Entenman, Victor P. Bond, Ralph W. Brauer, William H. Goldwater and George F. Leong, and Mr. Leonard J. Cole.

Following are the titles of the papers and the authors. The underscored name is that of the scientist who will present the paper:

1. Effect of X-irradiation on the Incorporation of Inorganic  $P^{32}$  into Phospholipids by Rat Liver Slices--by Cecil Entenman and Ernest O. Weinman.

2. Protective Effect of Spleen Homogenates Administered to Mice after X-irradiation-- by Leonard J. Cole, Marie E. Ellis, M. C. Fishler, and V. P. Bond.

3. Radiation Effects in Isolated Organs.

1. Effects of X-irradiation on Bile Flow, Performance and Survival in the Isolated Rat Liver, and Comparison with Several Vasoactive Agents -- by Ralph W. Brauer, G.F. Leong, and R. J. Holloway.

4. Bowel Tumors Resulting from Deuteron Irradiation --by Victor P. Bond, M.N. Swift, C. A. Tobias, and G. Brecher.

5. Enlargement of the Liver Following Whole Body X-irradiation -- Helen Supplee and Cecil Entenman.

6. Pretreatment with Cysteine in Partial Body X-irradiation --Marguerite Swift, V.P. Bond, and S. T. Taketa.

7. Mechanism of Bile Formation in Isolated Perfused Liver. Origin of the Major Constituents of Bile --by George F. Leong, R. W. Brauer, and J. S. Krebs.

8. Human Serum Lipoprotein Mechanism in Starvation Lipemia --by William H. Goldwater and co-workers from Tulane University Medical School, New Orleans.

Dr. Entenman will also present a paper at the meeting of the American Association for Cancer Research which will take place in New York on 11, 12, and 13 April. This paper, "Plasma Sulfhydryl Levels During Growth and Regression of Murphy Rat Lymphosarcoma," was prepared by Doctors Bernard Schacter, Cecil Entenman, and Michael Shimkin.

#### LABORATORY VISITORS

LCDR Roscoe C. Glasmann, Jr.,  
District Survey Board,  
12 ND, San Francisco.

Mr. James J. Kearns,  
BuShips, Washington, D. C.

FROM CAMP DETRICK, Maryland:  
Dr. Emily H. Kelly  
Dr. Sidney J. Silverman.

Lt. Col. George E. Moore, USMC,  
Washington, D. C.

Mr. Hugo Meneghelli,  
USNOTS, Inyokern.

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#### FORMER NRDLER TO PARTICIPATE IN MEDICAL MEETING

Dr. Robert L. Rosenthal, formerly with our Bio-Med Division, will present a paper at a meeting of the American Association for Pathology and Bacteriology in New York on 11 April 1952. The subject of his paper is "Relation of Hemorrhage to Hematopoieses, Blood Coagulation, and Mortality after Total Body X-Irradiation." Some of the experiments that led to the writing of this paper were conducted at NRDL. Dr. Rosenthal will be remembered as the recipient of a patent for the "Method and Apparatus for Measuring Resistance of Blood During Clotting," the work of which was also done at this Laboratory, when Dr. Rosenthal was stationed here as an Army captain. He is now associated with the Beth Israel Hospital, New York City.

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#### AT LONG LAST

After waiting the customary aeon, Duane O. Rubadeau has a home telephone. It is Flanders 5-2771.

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#### LT. WENTZLER LEAVING LAB

A year ago the BULLETIN announced Pvt. Herman L. Wentzler's receipt of a commission in the Air Force Reserve. Since then he has been serving in the grade of Private, USAF in the Air Force Liaison Office of the USNRDL. On 26 March 1952 he received notification of his orders to active duty in the grade of 2nd Lt., U.S. Air Force.

Lt. Wentzler is a native of Lykens, Pennsylvania where he received his early education, finishing high school in 1943. He then attended Waynesburg College as a chemistry major and graduated with a B.S. degree in 1950. He came to the Laboratory from the college.

Lt. Wentzler and his wife, Patricia Ann, now live at 909 Earl Street, San Francisco, but not for long. Upon completion of administrative processing, Lt. Wentzler will leave for Wright-Patterson Air Force Base, Dayton, Ohio, for duty at the Wright Air Development Center.

Upon receipt of the orders, Captain Bird, Director of the Laboratory, and Major H. A. Myers, Air Force Liaison Officer, presented Lt. Wentzler with hearty congratulations and a pair of giant-sized second lieutenant bars commensurate with their esteem and delight at his promotion.

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#### 50 LITTLE-KNOWN FACTS ABOUT THE ATOM -- By Dr. Ralph E. Lapp (Published through courtesy of COLLIERS)

##### 13. Can an H-bomb be made to work?

Probably. No H-bomb has been tested yet. The special kind of hydrogen for the weapon could be produced in the so-called H-bomb plant being built on the Savannah River. This plant is not yet completed. When it is finished, it may well be used to produce more material for small A-bombs rather than for big H-bombs. The super H-bomb, 1,000 times more powerful than an A-bomb, has excited much speculation, but as a military weapon it would add little to our atomic arsenal. Today the United States already has enough big A-bombs to reduce the bulk of Russia's industry to rubble. This being true, the super H-bomb would be of limited military usefulness. It would, however, have psychological-political value.

## NAVY RESEARCH ON TELEVISION

"Science Goes To Sea", a half-hour documentary feature showing some results of the Navy's research program will be presented over Station KPIX (Channel 5) from 5:30 to 6:00 PM next Sunday, 6 April.

The program, produced jointly by the Bureau of Supplies and Accounts and Johns Hopkins University, outlines the dollars and cents savings to the taxpayer which have resulted from the Supply Corps' portion of the overall Navy research effort.

Of particular interest to NRDL is the project for preserving food by treatment with beta particles. Milk and meat treated by this BuSanda-developed process remain fresh indefinitely and do not require refrigeration. Among the other topics reviewed are the application of digital computers to the solution of complex logistics problems and recent developments in subsistence and clothing. These include precooked food which can be loaded aboard a submarine to last for a 90-day cruise. This was developed for use in nuclear-powered and diesel submarines. The removal of waste such as bones, cores, and peelings facilitates storage, and, packed in disposable containers instead of tin cans, solves the garbage problem. Pre-fabricated veal, like the beef we had during the war, is another development, and radar ranges that cook food in 30 seconds, have been developed to a point where they can be installed on board ships.

The clothing innovations are (1) an arctic uniform weighing 18 pounds that will keep a man warm in minus 65 degree temperature while he is at rest, and (2) submarine clothing that will keep a man dry on the bridge of a partly submerged submarine. This suit is made of nylon and neoprene with a life preserver built into it. In the old days submariners wrapped towels around their necks to keep out the water. The material used to act as a seal between the suit and the body to prevent the entrance of water is cellular rubber called "ensolite." LCDR J. C. Busby, the BuSanda Liaison Officer, played "guinea pig" to test this one. He donned one of the suits and was tied to the deck of a submarine that ploughed through the Pacific. He came out of it DRY, but somewhat the worse for wear!

The new anti-frostbite boot now used by the Army and Marines in Korea will be demonstrated along with a history of its development by BuSanda's Clothing Research Group at Brooklyn, New York. LCDR Busby is the co-inventor of this boot and was in charge of a research expedition in Alaska which first tested it in 1948. Research achievements in the field of supply engineering which are briefly reviewed include new pallets and materials handling equipment, ship loading techniques, and various packaging and preservation discoveries.

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## DID YOU APPLY FOR A DECAL?

This is a reminder that your application for a SFNS automobile decal must be submitted to the Pass Office, Bldg. 520, by 15 April 1952. Your application must be accompanied by your automobile insurance policy.

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## ANTICIPATED VISITORS

Doctors Edward Gilfillan and Marvin G. Schorr, from AFSWP, Washington, D. C., will visit a number of Laboratory staff members on Monday, 7 April.

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## DR. BOND'S OFFICE HAS NEW NUMBER

The Experimental Pathology and Pharmacology Branch telephone extension has been changed to 2279. Persons who may be reached at this number are:

Dr. V. P. Bond	Mrs. Jane Holp
Dr. R. W. Brauer	Dr. G. F. Leong
Mr. Paul Chin	Dr. M. Silverman
Mr. L. J. Cole	Miss Peggy Swift
Mr. Roy Holloway	Mr. Tom Taketa
Dr. Paul Toch	

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## REVISED LIST OF AUTHORIZED SIGNERS

1. Following are the Laboratory personnel authorized to sign and release messages for NRDL by direction of the Commanding Officer or the Director:

J. L. Bird, CAPT, USN  
Dr. P. C. Tompkins  
H. F. Burkwall, CAPT (MC), USN  
H. H. Fox, Jr., CDR, USN  
R. D. Wolfe, Lt Col, CE, USA (For Project Officers)  
P. S. Johnson, CDR, USNR  
C. L. Conner, LCDR, USNR  
R. K. SKOW, LCDR, USN (For specifically designated subjects)  
L. J. Smith, LT, USN (For enlisted personnel matters)  
E. D. Frerichs, LTJG, USNR  
F. J. Pinkert  
Dr. E. P. Cooper

2. Messages involving controversial matters, commitments, requests for funds, or policy shall invariably be referred to the Director for release or approval prior to release. PRIORITY dispatches may be released only by the Director.

3. The Laboratory Duty Officer may release messages in an emergency provided none of the foregoing subjects is involved.

4. Further information regarding messages is contained in NRDL Memorandum No. 76.

5. This Memorandum supersedes NRDL Memorandum 84 (Revised) of 25 February 1952, and shall be incorporated into the NRDL Administrative Manual (Temporary).

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## INTERESTED IN MEXICAN ART?

Art Heller, Military Evaluations Branch, has a colored silk screen print, "Zapatistas," by the eminent Artist, Orozco, which he would like to sell. It is 24 x 36 inches and framed in blonde shadow-box frame. If interested, call Heller at Ext. 2687.

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## LAB TRAVELERS

Messrs. J. E. Law and F. A. Devlin recently spent a day in Stockton at the Navy Supply Annex in connection with monitoring boats and storage.

Dr. Samuel I. Taimuty went to Rand Corp., Santa Monica, on matters relative to gamma ray transmission.

## NEW SERVICE PERSONNEL

William Henry Gibbs, HMC, USN, arrived for duty with Bio-Med Division last week. Chief Gibbs was born in Montgomery, Alabama. He finished high school in Danville, Indiana, in 1939 and attended the U. S. Armed Forces Institute, taking a general academic course on college level. Before coming to the Laboratory, Chief Gibbs was stationed on USS LST 758. He is awaiting the arrival of his wife, Marjorie, and daughter, Faith, who are living temporarily in Pittsboro, Indiana. Hunting and fishing are the diversions Chief Gibbs likes best.

Gordon Stirling Pistole, DMM3, USNR, is a new member of Technical Developments Branch, Chemical Technology Division. Draftsman Pistole is a native San Franciscan who graduated from Lowell High School in 1943. He attended the University of California, graduating with a B. S. degree in Mechanical Engineering in 1949. His last station was with Mobile Construction Battalion #2, Naval Air Station, Atsugi, Japan, where he served for fifteen months. His mother, Mrs. Elmer Pistole, lives at 232 Colon Avenue, San Francisco, phone JUniper 7-6772. Draftsman Pistole's hobbies are sports and photography.

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## BENEFICIAL INSURANCE RATES RAISED

On 1 January 1953 dues will be increased to \$1.50 per unit for all members of the Navy Beneficial Insurance whose certificates are dated prior to 1 November 1948. Dues for members holding certificates dated 1 November 1948 through 1 November 1950 will remain at \$1.00 per unit, and dues for members with certificates dated 1 November 1950 and thereafter will remain the same, \$1.50 per unit.

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## FIVE YEAR PINS DUE

Three Laboratory members are on the list to receive pins for "five years of faithful service and making a valuable contribution to our Navy in peace and war." They are Margaret C. Jenkins, Head of Office Services Branch, and Edith Axley and Anna Marie Jahn, both of Security Branch.

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## RAD SAFETY BRANCH MOVED

The Radiological Safety Branch now occupies Rooms 113, 123, 124, and 125 in Bldg. 351B. New telephone extensions are:

<u>3152</u>	<u>3026</u>
A. L. Baletti	E. J. Hailey
	J. E. Law
<u>3153</u>	R. M. Brown
A. L. Smith	F. A. Pacher
C. J. Camp	F. A. Devlin
W. G. Neall	T. W. Vickers

## OTHER RECENT MOVES

Messrs. Bernard Signer and W. B. Lane of Chemical Technology Division, Code 3-921, are now located in Rm. 24, Bldg. 506, Ext. 2496.

The Stock and Issue Section (warehouse) is now located on the first floor of Bldg. 351B, Ext. 3225.

Mr. R. W. Kennedy and LCDR M. Kuhn, of the Facilities Engineering Division, have moved from Bldg. 520 to Bldg. 508, Rm. 124, Ext. 2663.

Management Planning Division, with the exception of Mr. H. F. Lindsay, has moved to Bldg. 508. Mr. Lindsay is in Room 19, Bldg. 520, Ext. 2633. Others in the Division are located in Bldg. 508 as follows:

Name	Room	Ext.
L. W. Jones	115	2631
E. D. Feder	115	2631
Virginia Tage	116	2358
Agnes Winfough	117	2358

## MORE INSTRUMENTS MOVES

The Evaluation Section, Instruments Branch, is now all under one roof, that of Bldg. 351B. Most of the Section moved two weeks ago. The "rear guard" consists of George Work, Head of the Section, Carol Lucas, his secretary, and Al Young, Editor. They are in Room 243, Ext. 3015 and 3016.

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## SHORT HISTORY!

From the OAK LEAF, 29 March 1952:

Wayne Westover of the Legal Office says that his degrees tell the story of his life:  
A.B., LLB, HM31

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## EMPLOYEES ON THE WING

### SHE SIGHS FOR STIMULATING SUBJECTS

Doris Denison of Illustrating Section, thinks white mice are pretty but monotonous. She wants work that is more stimulating and intends to concentrate on the broader scope of free lancing. Doris has exhibited delightful talent for the imaginative in her work, such as the Rad Safety and Security Cartoons, since she blew in in January 1951. This girl "has what it takes" and should go far in the commercial field.

### AND THEN THERE WERE FOUR

Roy Riley is the fourth member of Engineering Services Division to leave us for the verdant pastures of Friden Calculator Company in San Leandro. He will be among friends, and we hope he will find the new job just what he wants. Mr. Riley joined NRDL last June.

### BIO-MED LOSING MEMBER

Friends of Dr. Jonathan S. Thatcher, of Biological and Medical Sciences Division, will be sorry to learn that he is leaving this week to go into private practice. The departure of this able doctor will be a loss to the Laboratory. Dr. Thatcher came to NRDL in September 1951.

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## TRANSPORTATION TROUBLES

### Car Pool

#### East Bay

William L. Finley (Ext. 2692)  
2725 Ashby Place, Berkeley  
TH 3-6128  
(1 driver for pool--pick up both sides of campus)

### Ride Wanted

#### San Francisco

Virginia Tage (Ext. 2358)  
3824 Scott St. (nr. Marina Blvd.)  
FI 6-4047.

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## NEW MEMOS

NRDL Memorandum No. 91

All Laboratory per diem employees are now excused from clocking their time cards. Supervisors are responsible for reporting the time of these employees in the same manner as that of per annum employees.

NRDL Memorandum No. 92

This Memo gives specific examples of the correct form for correspondence to be signed by the Commanding Officer or the Director.

1. Signature of the Commanding Officer is necessary on correspondence concerning military matters or matters of unusual importance. (If in doubt check with office of the Director.)

From: Commanding Officer, U.S. Naval  
Radiological Defense Laboratory

To:

1. Message

A. L. BECKER

2. Signature of the Director is sufficient for:

a. Internal and local correspondence  
(within Laboratory or Shipyard)

From: Director, U.S. Naval Radiological  
Defense Laboratory

To:

1. Message

J. L. BIRD

b. Routine correspondence to activities  
outside SFNS.

From: Commanding Officer, U.S. Naval  
Radiological Defense Laboratory

To:

1. Message

J. L. BIRD  
Director

c. Business style correspondence.\*

Mr. -----:

Dear Mr. ---:

Very truly yours,

J. L. BIRD  
Captain, U.S. Navy  
Director

\* Where address is a public, military, church  
or other dignitary, see Navy Correspondence  
Manual or Call Code 3-286C for proper style.

3. Signature of other members of the staff who are  
signing "By Direction."

From: Commanding Officer, U.S. Naval  
Radiological Defense Laboratory

To:

1. Message

John F. Doe  
Head, Accounting Division  
By Direction

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## ON THE BINNACLE LIST

Barbara Albee (Communications) is in St. Luke's Hospital for minor surgery. She is improving and should be back to work soon.

La Verne Seidenkranz (Personnel) is having a bout with the "flu" or virus as it is now fashionably called. And just when she was recovering from an auto accident, too!

Helen Busby (Sec., Adm. Officer) was out part of this week with an infected wisdom tooth.

Norma Onó (Transportation) is back on the job after a "tour" in Mt. Zion Hospital.

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## CHICAGO SCIENTIST TO SPEAK AT BIO-MED SEMINAR

Dr. Donalee L. Tabern, Chief of Special Research, Abbott Laboratories, North Chicago, will be the speaker at the Bio-Med Seminar next Tuesday. Dr. Tabern is an eminent organic chemist and is also in charge of Abbott operations at Oak Ridge. He has done extensive research on Pentothal and Mebutal.

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## NEW CIVILIAN PERSONNEL

### CHEMICAL TECHNOLOGY DIVISION

Richard Cole, a chemist, is the newest addition to Applied Research Branch. A native of New York City, Dr. Cole received his earlier education in that vicinity, graduating from Abraham Lincoln High School, Brooklyn, in 1940, and from City College, New York, with a B.Ch.E. degree in 1944. His master's and doctor's degrees were conferred by the University of Illinois in 1948 and 1952, and he came directly from the University to NRDL. Dr. Cole and his wife, Margaret, live at 1402 Shrader Street, San Francisco. His hobbies include music and camping.

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### BRUNO IMPROVING

The Laboratory will be glad to hear that Thomas Bruno, Janitor in Bldg. 351, is well on the road to recovery from an injury recently received when a roller-bearing race and retainer fell on his foot. Thomas hasn't missed a day of work because of this accident.

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### HOW ABOUT SWAPS?

It has been suggested that possibly a good many Lab employees have "white elephants" which they would like to swap for someone else's "pink elephants." What are your thoughts on this? Would you like a trading post item in the BULLETIN now and then? Or is this beneath the dignity of such an austere publication?

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### SHEPPARD'S FLOCK ARRIVED

Anne Marie, weight 7 pounds 7 ounces, arrived on 4 March to Alice Anne and John Sheppard, both former employees at NRDL. They are now living in St. Louis, Missouri, where John is attending school Washington University and Alice Anne is attending Anne Marie.

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## NOTICE, STENOS!

San Francisco Public Schools invite all secretaries and stenographers, or those aspiring to be that status, to a series of four presentations on SECRETARIAL PROCEDURE at Commerce Adult School, Van Ness and Hayes Streets, San Francisco, on Friday evenings from 7:00 to 9:00 PM, beginning tonight, 4 April. The first session will feature "The Efficient Secretary is a Triple-Threat Woman!" --dealing with the secretary as a stenographer, as a confidential secretary, and as a personality. Guest speakers, movies, and group discussions will be offered as a free public service of the Public School System. To enroll, merely report on any Friday evening to Commerce Adult School.

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### ONE YEAR AGO AT USNRDL

Air Raid Warning Signals changed: Red Alert--three minutes of fluctuating or warbling signals by varying pitch by sirens, or a series of short blasts by horns or whistles. All Clear--three steady one-minute blasts by sirens, horns, or whistles, interrupted by silent periods of two minutes each.... Passing of Lt. Jarrett saddened the Laboratory.... Pvt. Wentzler received a commission as 2nd Lt., USAF Reserve.... Letter of appreciation from Sandia Base officers to CAPT Bird for tour of Laboratory stated they were "impressed by the sincerity, enthusiasm, and quality of Lab personnel" (the knowledge they gleaned was incorporated in lectures of Staff Officers' Orientation Course)....

#### New Employees A Year Ago:

Sarah E. Kelly (Bio-Med)  
Stanley E. Turner (Chem-Tech)  
Malcolm H. Brownell (Eng. Ser)  
Charles R. Morse (Nucleonics)  
Stanley F. Bennett (Illus.)

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The Inlet of a man's mind is what he learns;  
the Outlet is what he accomplishes.

-- Jeremiah Jenks.

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## CALENDAR OF EVENTS

### At USNRDL

#### MONDAY 7

1:00 - 3:00 PM Seminar, Bio-Med, at  
Conference Room Shop 11

Speakers: Representatives going to  
Fed. of Am. Soc. for Exp.  
Biology Meeting in N. Y.

Subj: Preview of papers to be  
presented.

#### TUESDAY 8

11:00 AM Seminar, Bio-Med at  
Conference Room Shop 11

Speaker: Dr. Donalee L. Tabern  
Abbott Laboratories, Chicago.

Subj: "Newer Aspects of  
Radioactive Isotopes."

### In the Bay Area

#### TUESDAY 8

7:30 PM Am. Inst. of Elec. Engrs.  
at Engineers' Club,  
206 Sansome St., S.F.

Speaker: Mr. C. C. Wheelchel, P.G. & E.

Subj: "Current Development in  
Steam Generating  
Stations."

#### FRIDAY 11

8:00 PM Natl. Assoc. of Power Engrs.  
at 3053 -16th St., S.F.

Speaker: Mr. Tom Tracy, of Minnea-  
polis Honeywell Regulator  
Co.

Subj: "Fundamentals of Flow Meters"

8:15 PM San Francisco Medical Society, at  
2180 Washington St., S.F.

Subj: I. Panel Discussion-"Problems in  
Present Day Diagnosis and Treatment  
of Chest Disease."  
(Members may submit in writing  
questions for inclusion, not later  
than 7 April)

## CALENDAR OF ENTERTAINMENT

### San Francisco Museum of Art

#### Exhibits

Photographs by Alfred Stieglitz  
April 3 - 27

A University Collects  
April 8 - 27

Marcel Breuer - Architect  
April 9 - May 4

Paris - An American Photographer's  
Impressions  
April 1 - 20

Photographs by Jasper Wood  
April 2 - 27

#### Lectures

"Art Makes Contact" - Barbara Fitzwilliams  
April 6 at 3:15 PM

"The Art of Today - "Beginnings of  
Modern Art in America"  
April 7 at 8:00 PM

"Art Makes Contact" - Martin Metal  
April 9 at 8:00 PM

### University of California

#### Exhibits

Fifty Books of the Year (best designed and  
printed during 1951) - Library

#### Lecture

Origins of Human Sexual Behavior -  
"Concepts of Normality and Abnormality  
in Sexual Behavior."  
Dr. Alfred C. Kinsey  
April 4 at 8:00 PM  
Wheeler Auditorium



## ON RESEARCH

(from PUNCH, 1935)

It is not absolutely necessary to have a research department—at least not one of your own. In fact the most efficient and economical type of research department is to have an employee whom you can really trust working in the research department of your principal competitor.

Moreover, not every type of business calls for research because --

(1) In some businesses there isn't really much left to find out. It would be a waste of money, for example, to have a perfectly equipped research laboratory if you are making hansom-cabs.

(2) Research is a long-term affair, and in some types of business the long term may only come after the business has come to an end. It is useless to set a research department to work on some deep technical problem in the manufacture of, say, shoelaces, since in twenty years' time, when the problem is finally solved, you may be --

- (a) making wall paper
- (b) in liquidation
- (c) in for life.

On the other hand, if there seems to be any likelihood that your business will go on and become an Old Established Concern, money spent on technical research may be a very real investment. Nay, more, it will probably be an Absolutely Typical Investment, since --

- (a) it costs a lot
- (b) it never pays a dividend
- (c) when you get tired of it you can't sell it.

## How To Run A Research Department

(1) In dealing with all research problems the greatest desideratum is Patience. The greatest of all the research problems is the people who do the research, and in dealing with them PATIENCE is not only a virtue but a necessity. Remember that the research worker's motto is "Rome was not built in a day, and we don't work night shifts." So, the three hundred and sixty-six days of a Leap Year when the research department doesn't discover anything are presumably some of the days when Rome was not built.

(2) It is worse than useless to point out to the research department that sales are falling, that profit margins are non-existent and that they haven't turned out a new idea for fifteen years. You can't expect them to be interested in your beastly sordid business. They are SCIENTISTS, and you can't hurry SCIENCE. It was precisely to avoid being worried by this sort of nonsense that they became research workers.

(3) Resist the temptation to ask the research department what the blazes is the use of anything it is doing. There are at least six very crushing replies which research people keep for those who ask this question -- "Sir," as Faraday to Mr. Gladstone, "can you tell me the use of a new-born child?"

So, if you are making straw hats and you find your research department deeply engrossed in inventing a new ferrochrome alloy, just be quietly encouraging and go away. Who knows? If war broke out you might be able to turn the place into a steel-helmet factory and make a fortune.

(more)

On Research (continued)

(4) If you are going to have a research department at all, go the whole hog and enter into the spirit of the thing. Build a laboratory and place in it a lot of bottles and benches. Then collect a few people from the universities with First Class Honours degrees in Chemistry (they are quite cheap at summer sales). Turn them loose in the laboratory and leave them. For a few days they will probably wander restlessly around, scratching at the doors and howling. But after a while they will settle down and start bending glass tubing and filtering things perfectly happily. And you will be able to show them to visitors, which is a very nice thing to be able to do.

(5) Try not to interrupt the research department with petty matters. It is a common mistake when some technical problem arises for the Managing Director to say, "Well, why shouldn't we get the research people in on this? After all, what are they for?"

Now this not only shows an entire lack of understanding of the meaning of research, but it is liable to cause difficulties. For with problems of this kind an answer is usually required quickly-- say before the following winter. And when we consider that the research department will have to set to work and bend special glass tubing and filter Heaven Knows What before it can begin, it is clear that to demand an answer to a question before next winter is very like trying to build Rome.....

It is far better, if one needs a quick answer on some technical problem, to get a roughly approximate one from old Joe Binks the foreman, who hasn't the advantages of a scientific education. Give the research department only Big Long-Term Problems and leave the results in trust for your heirs.

TO SUM UP

The following are the main advantages and disadvantages of a research department:

ADVANTAGES

(1) It does no harm

(2) Visitors and share holders are impressed by the sight of so much science and the smell of so much sulphuretted hydrogen.

(3) It provides congenial employment for a number of people who otherwise would infallibly be reduced to teaching small boys that



(4) One of these days someone may find out something which will Make All the Difference to your business. The thing is at least statistically possible.

(5) Scientists are usually nice quiet lads without vice.

DISADVANTAGES

(1) Cash

We cannot visualize any business man, comparing the advantages with this single slight impediment, being in any doubt as to what he should do. Money isn't everything, and you can always get somebody eminent to come down and open the Research Block.